AMENDMENTS TO THE CLAIMS

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1. (Currently Amended) A compound having the formula I

$$(R^3)_n \qquad \qquad X^1 \qquad \qquad X^2 \qquad \qquad P \qquad (R^1)_m \qquad \qquad \\ N_1 \qquad \qquad R^4 \qquad \qquad R^2 \qquad \qquad P \qquad \qquad \\$$

(I)

wherein:

X¹ is O or S;

X² is a bond or C₁₋₃alkylene;

P is C₃₋₇cycloalkyl or C₄₋₇cycloalkenyl;

R¹ is hydrogen, C₁₋₆alkyl, cyano, halogen and C₁₋₆alkylhalo, and one or more R¹ may be connected to each other or to one of the atoms that constitutes P to form a bridge or spirocyclo; R² is hydrogen, C₁₋₃alkyl, fluoromethyl, difluoromethyl, trifluoromethyl, methoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, C₀₋₃alkylamino,

C₁₋₃alkoxy, hydroxy C₀₋₃alkylhydroxy or C₀₋₃alkyldimethylamino;

 R^4 is hydrogen, C_{1-3} alkyl, fluoromethyl, difluoromethyl, trifluoromethyl, methoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, C_{1-3} alkylamino,

 C_{1-3} alkoxy, hydroxy C_{0-3} alkylhydroxy or C_{0-3} alkyldimethylamino;

Q is a saturated or partially unsaturated ring containing 4, 5, 6 or 7 atoms independently selected from C, S, O and N, and said ring may further contain groups independently selected from SO, SO₂, CO, cyano and CS;

R³ is hydrogen, hydroxy, halogen, nitro, cyano, OC₁₋₃alkylhalo, C₁₋₃alkylhalo, C₁₋₃alkyl, C₁₋₃alkyl, C₁₋₃alkylOC₂₋₄hydroxyalkyl, C₁₋₃alkylOC₂₋₄hydroxyalkyl, hydroxyC₁₋₃alkyl, C₁₋₃alkyl, C₁₋₃alkyl, (C₁₋₃alkyl)₂aminoC₀₋₃alkyl, amide,

 $C_{1\text{--}3}$ alkylamide $C_{0\text{--}3}$ alkyl or $(C_{1\text{--}3}$ alkyl)₂amide $C_{0\text{--}3}$ alkyl; n is 0, 1, 2, 3 or 4; and

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m is 0, 1, 2, 3 or 4;

or N₁-oxides, or salts thereof.

2. (Currently Amended) A compound having the formula I

$$(R^3)_n \qquad \qquad X^1 \qquad \qquad X^2 \qquad \qquad (R^1)_m \qquad \qquad (R^1)_m \qquad \qquad (I)$$

wherein:

X1 is O or S;

X² is a bond or C₁₋₃alkylene;

P is C₃₋₇cycloalkyl or C₄₋₇cycloalkenyl;

R¹ is hydrogen, C₁₋₆alkyl, cyano, halogen and C₁₋₆alkylhalo, and one or more R¹ may be connected to each other or to one of the atoms that constitutes P to form a bridge or spirocyclo; R² is hydrogen, C₁₋₃alkyl, fluoromethyl, difluoromethyl, trifluoromethyl, methoxy, fluoromethoxy, difluoromethoxy or trifluoromethoxy;

R⁴ is hydrogen;

Q is a saturated or partially saturated unsaturated ring containing 4, 5, 6 or 7 atoms independently selected from C, S, O and N, and said ring may further contain groups independently selected from SO, SO₂, CO, cyano and CS;

 $R^3 \ is \ hydrogen, \ hydroxy, \ halogen, \ nitro, \ OC_{1\text{--}3}alkylhalo, \ C_{1\text{--}3}alkylhalo, \ C_{1\text{--}3}alkylhalo,$

 C_{1-3} alkoxy C_{0-3} alkyl, $\frac{hydroxyC_{1-3}alkyl}{C_{1-3}hydroxyalkyl}$ cyano, amino or amide;

n is 0, 1, 2, 3 or 4; and

m is 0, 1, 2, 3 or 4;

or N₁-oxides, or salts thereof.

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3. (Original) The compound according to any one of claims 1 or 2, wherein P is C₃₋₇cycloalkyl

substituted with one or more R1, wherein R1 is hydrogen, C1-6alkyl, cyano, halogen or

C₁₋₆alkylhalo, and one or more R¹ may be connected to each other or to one of the atoms that

constitutes P to form a bridge or spirocyclo.

4. (Original) The compound according to claim 3, wherein P is C₅₋₇cycloalkyl substituted with

one or more R1, wherein R1 is methyl.

5. (Previously Presented) The compound according to any one of claims 1 or 2, wherein X¹ is

oxygen.

6. (Previously Presented) The compound according to any one of claims 1 or 2, wherein X^2 is a

bond.

7. (Previously Presented) The compound according to any one of claims 1 or 2, wherein R² is

hydrogen.

8. (Previously Presented) The compound according to any one of claims 1 or 2, wherein R⁴ is

hydrogen or methyl.

9. (Previously Presented) The compound according to any one of claims 1 or 2, wherein O is a

saturated or partially unsaturated ring containing 5, 6 or 7 atoms independently selected from C.

O and N.

10. (Previously Presented) The compound according to any one of claims 1 or 2, wherein R³ is

hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.

11. (Previously Presented) The compound according to any one of claims 1 or 2 having a transrelationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

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12. (Previously Presented) The compounds

N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide, N-(4,4-dimethylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide, or salts thereof.

13. (Previously Presented) The compounds

N-(4,4-dimethylcyclohexyl)-3-methyl-5,6,7,8-tetrahydroquinoxaline-2-carboxamide, 8-methyl-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide, 7-hydroxy-5,7-dimethyl-N-(trans-4-methylcyclohexyl)-6,7-dihydro-5H-cyclopenta[b]pyrazine-2-carboxamide,

N-(trans-4-methylcyclohexyl)-6,7,8,9-tetrahydro-5H-cyclohepta[b]pyrazine-2-carboxamide,
7-methyl-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
6-methyl-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
N-(trans-4-methylcyclohexyl)-6,7-dihydro-5H-cyclopenta[b]pyrazine-2-carboxamide,
N-(trans-4-methylcyclohexyl)-7,8-dihydro-5H-pyrano[3,4-b]pyrazine-2-carboxamide,
N-(trans-4-methylcyclohexyl)-7,8-dihydro-5H-pyrano[3,4-b]pyrazine-3-carboxamide,
7-hydroxy-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
6-hydroxy-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
N-(4,4-dimethylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide 4-oxide and
6,7-dimethyl-N-(4-methylcyclohexyl)-6,7-dihydro-5H-cyclopenta[b]pyrazine-2-carboxamide,
or salts thereof.

14. (Withdrawn and Previously Presented) A pharmaceutical composition comprising as active ingredient a therapeutically effective amount of the compound according to any one of claims 1

or 2, in association with one or more pharmaceutically acceptable diluent, excipients and/or inert

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carrier.

15. (Withdrawn) The pharmaceutical composition according to claim 14, for use in the treatment

of Group I mGluR mediated disorders.

16.-18. (Cancelled)

19. (Withdrawn and Previously Presented) A method of treatment of Group I mGluR mediated

disorders, comprising administering to a mammal, including man in need of such treatment, a

therapeutically effective amount of the compound according to any one of claims 1 or 2.

20. (Withdrawn) The method according to claim 19, for use in treatment of neurological

disorders.

21. (Withdrawn) The method according to claim 19, for use in treatment of psychiatric

disorders.

22. (Withdrawn) The method according to claim 19, for use in treatment of chronic and acute

pain disorders.

23. (Withdrawn) The method according to claim 19, for use in treatment of gastrointestinal

disorders.

24. (Withdrawn) A method for inhibiting activation of Group I mGluR receptors, comprising

treating a cell containing said receptor with an effective amount of the compound according to

claim 1 or 2.

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25. (Withdrawn) Processes for the preparation of the compound according to claim 1 or 2, wherein P, Q, X¹, X², R¹, R², R³, R⁴, m and n are, unless otherwise specified, defined as in formula I, comprising of:

$$(R^{3})_{n} \xrightarrow{Q} N_{1} \xrightarrow{R^{4}} O \xrightarrow{R^{y}} HN \xrightarrow{X^{2}} P \xrightarrow{(R^{1})_{m}}$$

$$(XIV)$$

$$(R^{3})_{n} \xrightarrow{Q} N_{1} \xrightarrow{R^{4}} N^{2} \xrightarrow{P} (R^{1})_{m}$$

$$(R^{3})_{n} \xrightarrow{Q} N_{1} \xrightarrow{R^{4}} R^{2} \xrightarrow{P} (R^{1})_{m}$$

$$(I)$$

reacting a compound of formula VII, wherein R^y is H, with an activating agent followed by the treatment of the resulting acid halide, or otherwise to nucleophiles activated acid derivative, with an amine of formula XIV, to obtain the compound of formula I, alternatively,

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reacting an amine of formula XIV with the compound of formula VII, wherein R^y is H, to obtain the compound of formula I, or

 \mathbf{C}

$$(R^{3})_{n} \qquad \qquad (R^{1})_{m} \qquad \qquad (X^{1})_{m} \qquad \qquad (X^{2})_{n} \qquad \qquad (X^{1})_{m} \qquad \qquad (X^{2})_{n} \qquad \qquad (X^{1})_{n} \qquad \qquad (X^{1})_{n}$$

reacting a compound of formula VIa or the N_1 -oxide thereof, wherein R^x is C_{1-6} alkyl, with the appropriate amine such as the compound of formula XIV, to obtain the compound of formula I,

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or,

D

(IV)
$$H_2N$$
 R^4 R^2 P $(R^1)_m$ (IV) (XVb) $(R^3)_n$ Q N_1 N_1 N_2 N_2 N_1 N_2 N_2 N_3 N_4 N_4 N_5 N_1 N_1 N_2 N_1 N_2 N_2 N_3 N_4 N_4 N_5 N_5 N_6 N_1 N_1 N_2 N_1 N_2 N_3 N_4 N_5 N_5 N_1 N_2 N_1 N_2 N_3 N_4 N_5 N_1 N_2 N_1 N_2 N_3 N_4 N_5 N_5 N_1 N_2 N_1 N_2 N_3 N_4 N_5 N_5

direct condensation of intermediates of formula IV and XVb, to obtain the compound of formula I.

26. (Withdrawn) Compounds

5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid methyl ester and

5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid.

27. (Withdrawn) Compounds

3-methyl-5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid ethyl ester,

3-methyl-5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid,

2,3-diamino-N-(4-methyl-cyclohexyl)-propionamide,

4-(tert-butyl-diphenyl-silanyloxy)-cyclohexane-1,2-dione,

6,7-dimethyl-6,7-dihydro-5H-cyclopentapyrazine-2-carboxylic acid methyl ester,

5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid methyl ester and

5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid.

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28. (Withdrawn) The compounds according to claims 26 and 27, for use as an intermediate in the preparation of the compound according to claim 1.

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- 29. (Previously Presented) The compound according to claim 3, wherein X¹ is oxygen.
- 30. (Previously Presented) The compound according to claim 4, wherein X¹ is oxygen.
- 31. (Previously Presented) The compound according to claim 3, wherein X^2 is a bond.
- 32. (Previously Presented) The compound according to claim 4, wherein X^2 is a bond.
- 33. (Previously Presented) The compound according to claim 5, wherein X^2 is a bond.
- 34. (Previously Presented) The compound according to claim 3, wherein R² is hydrogen.
- 35. (Previously Presented) The compound according to claim 4, wherein R² is hydrogen.
- 36. (Previously Presented) The compound according to claim 5, wherein R² is hydrogen.
- 37. (Previously Presented) The compound according to claim 6, wherein R² is hydrogen.
- 38. (Previously Presented) The compound according to claim 3, wherein R⁴ is hydrogen or methyl.
- 39. (Previously Presented) The compound according to claim 4, wherein R⁴ is hydrogen or methyl.
- 40. (Previously Presented) The compound according to claim 5, wherein R⁴ is hydrogen or methyl.

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- 41. (Previously Presented) The compound according to claim 6, wherein R⁴ is hydrogen or methyl.
- 42. (Previously Presented) The compound according to claim 7, wherein R⁴ is hydrogen or methyl.
- 43. (Previously Presented) The compound according to claim 3, wherein Q is a saturated or partially unsaturated ring containing 5, 6 or 7 atoms independently selected from C, O and N.
- 44. (Previously Presented) The compound according to claim 4, wherein Q is a saturated or partially unsaturated ring containing 5, 6 or 7 atoms independently selected from C, O and N.
- 45. (Previously Presented) The compound according to claim 5, wherein Q is a saturated or partially unsaturated ring containing 5, 6 or 7 atoms independently selected from C, O and N.
- 46. (Previously Presented) The compound according to claim 6, wherein Q is a saturated or partially unsaturated ring containing 5, 6 or 7 atoms independently selected from C, O and N.
- 47. (Previously Presented) The compound according to claim 7, wherein Q is a saturated or partially unsaturated ring containing 5, 6 or 7 atoms independently selected from C, O and N.
- 48. (Previously Presented) The compound according to claim 8, wherein Q is a saturated or partially unsaturated ring containing 5, 6 or 7 atoms independently selected from C, O and N.
- 49. (Previously Presented) The compound according to claim 3, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.

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50. (Previously Presented) The compound according to claim 4, wherein R^3 is hydrogen, hydroxy, halogen, cyano, C_{1-3} alkyl or C_{1-3} alkyl.

- 51. (Previously Presented) The compound according to claim 5, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.
- 52. (Previously Presented) The compound according to claim 6, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.
- 53. (Previously Presented) The compound according to claim 7, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.
- 54. (Previously Presented) The compound according to claim 8, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.
- 55. (Previously Presented) The compound according to claim 9, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.
- 56. (Previously Presented) The compound according to claim 3 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.
- 57. (Previously Presented) The compound according to claim 4 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.
- 58. (Previously Presented) The compound according to claim 5 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

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- 59. (Previously Presented) The compound according to claim 6 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.
- 60. (Previously Presented) The compound according to claim 7 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.
- 61. (Previously Presented) The compound according to claim 8 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.
- 62. (Previously Presented) The compound according to claim 9 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.
- 63. (Previously Presented) The compound according to claim 10 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.
- 64. (Previously Presented) The compound according to Claim 1, wherein R⁴ is hydrogen, C₁₋₃alkyl, fluoromethyl, difluoromethyl, trifluoromethyl, methoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, C₁₋₃alkylamino, C₁₋₃alkoxy, hydroxy.
- 65. (Previously Presented) The compound according to any one of Claims 1 or 2, wherein Q is cyclohexyl, cyclohexenyl, cyclopentyl, cyclopentenyl, imidazolidinyl, imidazolinyl,

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morpholinyl, piperazinyl, piperidyl, piperidonyl, pyrazolidinyl, pyrazolinyl, pyrrolinyl, tetrahydropyranyl or thiomorpholinyl.

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